

PATENT TMP-2023/020513

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Mirchandani, Prakash K.

Group Art Unit: 1742

Examiner: George P. Wyszomierski

Serial No.: 10/735,379

Filed: December 12, 2003

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COMPOSITES

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

November 15, 2006

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Applicant, in accordance with his duty of disclosure pursuant to 37 C.F.R. § 1.56, hereby advises the United States Patent and Trademark Office of the references listed on the accompanying Form PTO/SB/08 *Information Disclosure Statement by Applicant*. A copy of any non-U.S. patent document cited therein is enclosed herewith.

Applicant notes that although the cited references may be relevant to the examination of the above-referenced application, under 37 C.F.R. § 1.97(h), the filing of

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I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to Mail Stop Amendment, Commissioner for Patents, 20. Box 1450, Alexandria, VA 22313-1450

PI-1673456

this *Information Disclosure Statement by Applicant* "shall not be construed to be an admission that the information cited in the statement is, or is considered to be, material to patentability as defined in §1.56(b)." Applicant further notes that the filing of this *Information Disclosure Statement by Applicant* is not an admission that the references cited therein constitute prior art under 35 U.S.C. §§ 102-103 with respect to the captioned application.

Pursuant to 37 C.F.R. § 1.97(b)(3), Applicant submits that no fee is necessary for consideration of this *Information Disclosure Statement by Applicant* because an Office Action on the merits has not yet been mailed. Nevertheless, the Commissioner is hereby authorized to charge any additionally required fees necessary for consideration of this *Information Disclosure Statement by Applicant* to Account No. 11-1110.

Respectfully submitted,

Bernard G Pike

Registration No. 46,993

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PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

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substitute for fo	rm 1449A/PTO			Con	Complete if Known		
				Application Number	10/735,379		
				Filing Date	December 12, 2003		
INFORMATION DISCLOSURE				First Named Inventor	Prakash Mirchandani		
STATEMENT BY APPLICANT				Art Unit	1742		
0				Examiner Name			
			_		George P. Wyszomierski		
(use as	many sheets as	neces	ssary)				
Sheet	1	of	4	Attorney Docket Number	TMP-2023/020513		

	U.S. PATENT DOCUMENTS						
Examiner	Cite	Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where		
Initials*	No.1	Number - Kind Code ² (if known)	MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Releva Figures Appear		
		2004/0060742 A1	04-01-2004	Kembaiyan et al.			
		2005/0126334 A1	06-16-2005	Mirchandani			
		2005/0211475 A1	09-29-2005	Mirchandani et al.			
		2005/0247491 A1	11-10-2005	Mirchandani et al.			
		2006/0131081 A1	06-22-2006	Mirchandani et al.			
		3,757,879	09-11-1973	Wilder et al.	1		
•		4,389,952	06-28-1983	Dreier et al.			
•	<u> </u>	4,743,515	05-10-1988	Fischer et al.			

	FOREIGN PATENT DOCUMENTS					
Examiner Cite		Foreign Patent Document	Publication Date	Name of Patentee or	Pages, Columns, Lines,	T
Initials*		Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	T⁵		
		AU 695583	02-05-1998	Fang et al.		
		CA 2,212,197	10-17-2000	Fang et al.		T
		EP 0453428 A1	10-23-1991	Sandvik		T
		EP 1244531 B1	10-06-2004	TDY Industries, Inc.		
		GB 945,227	12-23-1963	Jersey Prod. Res. Co.		
		GB 2,393,449 A	03-31-2004	Kembaiyan et al.		
		WO 03/049889 A2	06-19-2003	Eason et al.		\mathbf{I}

Examiner	Date	
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STATEMENT BY APPLICANT	Art Unit	1742
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(use as many sheets as necessary)		George P. Wyszomierski
Sheet 2 of 4	Attorney Docket Number	TMP-2023/020513

		U.	S. PATENT DO	CUMENTS	
Examiner Initials*	Cite No.1	Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	 	4,923,512	05-08-1990	Timm et al.	
		5,281,260	01-25-1994	Kumar et al.	
		5,348,806	09-20-1994	Kojo et al.	
		5,482,670	01-09-1996	Hong	
		5,484,468	01-16-1996	Östlund et al.	
		5,543,235	08-06-1996	Mirchandani et al.	
		5,593,474	01-14-1997	Keshavan et al.	
		5,612,264	03-18-1997	Nilsson et al.	
		5,677,042	10-14-1997	Massa et al.	
		5,679,445	10-21-1997	Massa et al.	
		5,697,046	12-09-1997	Conley	
		5,733,649	03-31-1998	Kelley et al.	
		5,733,664	03-31-1998	Kelley et al.	
		5,776,593	07-07-1998	Massa et al.	
		5,778,301	07-07-1998	Hong	
		5,789,686	08-04-1998	Massa et al.	
		5,806,934	09-15-1998	Massa et al.	

	FOREIGN PATENT DOCUMENTS					
		Foreign Patent Document		Name of Detector of	Pages, Columns, Lines,	
Examiner Initials*	Cite No.1	Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	⊤್

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		Number - Kind Code ² (if known)	MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant Figures Appear	
		5,830,256	11-03-1998	Northrop et al.		
		5,856,626	01-05-1999	Fischer et al.		
		5,880,382	03-09-1999	Fang et al.		
		6,086,980	07-11-2000	Foster et al.		
		6,089,123	07-18-2000	Chow et al.		
		6,209,420 B1	04-03-2001	Butcher et al.		
		6,214,287 B1	04-10-2001	Waldenström		
		6,220,117 B1	04-24-2001	Butcher		
		6,228,139 B1	05-08-2001	Oskarrson		
		6,254,658 B1	07-03-2001	Taniuchi et al.		
		6,287,360 B1	09-11-2001	Kembaiyan et al.		
		6,290,438 B1	09-18-2001	Papajewski		
		6,293,986 B1	09-25-2001	Rödiger et al.		
		6,511,265 B1	01-28-2003	Mirchandani et al.		
		6,685,880 B2	02-03-2004	Engström et al.		

		FOREIGN I	PATENT DOC	JMENTS		
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			CANT	Art Unit	1742	
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(use as	many sheets as	s nece	ssarv)		George P. Wyszomierski	
Sheet	4	of	4	Attorney Docket Number	TMP-2023/020513	

NON PATENT LITERATURE DOCUMENTS							
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published					
	ļ	United States Patent Application No. 11/206,368 filed August 18, 2005 (65 pages)					
Examiner Signature]	Date Considered					

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